AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) A method for recovering a titanium compound, comprising bringing a waste solution containing a titanium alkoxide into contact with a halogenating agent to convert the titanium alkoxide to a titanium halide and then distilling the solution containing the titanium halide to recover the titanium halide from the solution.

2. (Previously presented) A method for recovering a titanium compound, comprising distilling a waste solution containing a titanium alkoxide and a titanium halide to recover a part of the titanium halide from the waste solution, bringing a residue in a distiller after the distilling into contact with a halogenating agent to convert the titanium alkoxide to a titanium halide, and then distilling the solution containing the titanium halide to recover the titanium halide from the solution.

3. (Canceled)

4. (Original) A process for preparing a titanium halide, comprising bringing a waste solution containing a titanium alkoxide into contact with a halogenating agent to convert the titanium alkoxide to a titanium halide.

5. (Previously presented) A process for preparing a titanium halide, comprising distilling a waste solution containing a titanium alkoxide and a titanium halide to recover a part of the titanium halide from the waste solution, and bringing a residue in a distiller after the distilling into contact with a halogenating agent to convert the titanium alkoxide to a titanium halide.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Previously presented) The method for recovering a titanium compound as claimed in claim 1, wherein the waste solution is a solution formed when a catalyst for polymer production or a catalyst component for polymer production is prepared.

10. (Previously presented) The method for recovering a titanium compound as claimed in claim 2, wherein the waste solution is a solution formed when catalyst for polymer production or a catalyst component for polymer production is prepared.

11. (Previously presented) The process for preparing a titanium halide as claimed in claim 4, wherein the waste solution is a solution formed when a catalyst for polymer production or a catalyst component for polymer production is prepared.

12. (Previously presented) The process for preparing a titanium halide as claimed in claim 5, wherein the waste solution is a solution formed when a catalyst for polymer production or a catalyst component for polymer production is prepared.

13. (Previously presented) A process for preparing a catalyst for polymer production, comprising:

recovering titanium halide according to the method of claim 1; and

preparing a catalyst for polymer production with the titanium halide.

14. (Previously presented) A process for preparing a catalyst for polymer production, comprising:

recovering titanium halide according to the method of claim 2; and

preparing a catalyst for polymer production with the titanium halide.

15. (New) The process for preparing a titanium halide as claimed in claim 4, wherein the halogenating agent is selected from the group consisting of:

(a) a metallic halide represented by the following formula (i):

Mx_n (i)

wherein M is selected from Li, Be, Na, Mg, Al, K, Ca, Sc, V, Cr, Mn, Fe, Ni, Cu, Zn, Ga, Pd Sn,

X is F, Cl, Br or I, and

n is a number satisfying a valence of M;

(b) a non-metallic halide represented by the following formula (ii):

$A=BX_m$ (ii)

wherein A is an oxygen atom or a sulfur atom,

B is a carbon atom, a sulfur atom or a phosphorus atom,

X is a halogen, and

m is a value obtained by subtracting 2 from the valence of B;

(c) an acid halide represented by the following formula (iii):

R-(C=O)X (iii)

wherein R is a hydrocarbon group, and

X is a halogen; and

(d) a halogenated hydrocarbon represented by the following formula (iv):

R_pCX_{4-p} (iv)

wherein R is a hydrocarbon group,

X is a halogen, and

p is an integer from 0 to 3.